Departmental Findings of Fact and Order Air Emission License

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Hussey Seating Company (Hussey) of North Berwick, Maine has applied to renew their Air Emission License permitting the operation of their spectator seating manufacturing facility.

B. Emission Equipment

Hussey is authorized to operate the following equipment:

Fuel Burning Equipment

Equipment Name	Maximum Capacity (MMBtu/hr)	Maximum <u>Firing Rate</u>	<u>Fuel Type</u>	Stack #
Boiler B-3	1.33	1,291 scf/hr	natural gas	B-3
Heater #9	2.00	1,942 scf/hr	natural gas	
Heater #19	4.13	4,000 scf/hr	natural gas	
Heater #23	1.46	1,417 scf/hr	natural gas	
Burn Off #10	1.00	971 scf/hr	natural gas	P10
First Stage Washer Heater	6.0	5,825 scf/hr	natural gas	P2
Dry-off Oven	2.4	2,330 scf/hr	natural gas	P5
Small Parts Cure Oven	1.2	1,165 scf/hr	natural gas	P6

In addition to the units listed above Hussey owns and operates several gas fired furnaces that have a maximum heat input capacity of less than 1 MMBtu/hour and are insignificant units not requiring to be permitted.

Departmental Findings of Fact and Order Air Emission License

Diesel Operated Fire Pumps

2

<u>Equipment</u>	Maximum Capacity (MMBtu/hr)	Power Output (hp)	Firing Rate (gal/hr)
Perkins	1.04	143	7.6
Cummings	1.01	137	7.4

Process Equipment

<u>Process</u>	<u>Pollutant</u>	Stack ID	Control Device
Hand Spray Coater #1	VOC, PM	P-1	filters
Hand Spray Coater #2	VOC, PM	P-7	filters
Hand Spray Coater #3	VOC, PM	P-8	filters
Welding (12 manual and	PM		filters
7 robotic)			
Welding (6 manual; 2	PM	W10 thru	
operating daily, 4		W15	
operating intermittently)			
Wood Working	PM	C1	cyclone and baghouse

C. Application Classification

The application for Hussey does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

Departmental Findings of Fact and Order Air Emission License

B. Boiler, Heaters and Ovens

Boiler B-3 has a heat input capacity less than 10 MMBtu/hr and is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

The heaters and ovens are not steam generating units and are therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

A summary of BPT for the units is discussed below:

- 1. PM, PM₁₀, SO₂, NO_x, CO and VOC emission rates were based upon AP-42 data dated 7/98 for boilers/heaters firing natural gas and having a heat input of less than 100 MMBtu/hr.
- 2. Visible emissions from each boiler, heater and oven shall be limited to 10% opacity on a six-minute block average basis.

C. Diesel Operated Fire Pumps

The Perkins Fire Pump and the Cummings Fire Pump are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source.

A summary of the BPT analysis for the existing diesel operated fire pumps is the following:

- 1. The Perkins Fire Pump and the Cummings Fire Pump shall only fire diesel fuel with a maximum sulfur content not to exceed 0.05% by weight as documented on fuel receipts.
- 2. The Perkins Fire Pump and the Cummings Fire Pump shall each be limited to 500 hr/yr of operation based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours.
- 3. The PM and PM₁₀ limits are derived from Chapter 103.
- 4. SO₂ emission data was based on fuel sulfur mass balance.
- 5. NO_x , CO, and VOC emission limits are based upon AP-42 data dated 10/96 for diesel engines less than 600 HP.
- 6. Visible emissions from the Perkins Fire Pump and the Cummings Fire Pump shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

1

Departmental Findings of Fact and Order Air Emission License

D. Processes Emissions

1. Powder Coat Finish System

PM emissions from the powder coat finish system is controlled by the use of filters and is receiving BPT.

2. Hand Spray Coaters #1, #2 and #3

VOC Reasonable Available Control Technology (RACT) for hand sprayed finishes of large steel structures includes the use of water borne enamel with a VOC content of less than 2.0 pounds per gallon of coating. BPT for hand spray processes includes the use of Andrea filters rated at 85% efficiency.

3. Roof Top Vents

The three new roof top vents will be used to remove excessive heat build up associated with the new finishing system, especially during the summer months. Opacity from vents P-18, 19 and 20 shall not exceed 5 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

3. Welding

Welding fumes emitted from 12 manual welding stations and 7 robotic welders are controlled by Dc-8 Air Filtration units and bench filtration units which discharge inside the work area. The remaining 6 manual welding units have no controls and are vented outside the building through stacks W10 through W15. BPT for these welding stations is limiting opacity from stacks W10 through W15 to less than 5 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

4. Woodworking

Wood processing includes cross cutting, jointing, ripping, shaping, and surface sanding. PM from the woodworking area is vented to a cyclone, which then connects to a set of fabric filters and vents back into the woodworking area. Other equipment vents to a single cyclone, which exhausts directly outdoors in summer months and is vented back inside during the heating season. BPT for the woodworking operations includes the use of cyclones and the fabric filter. Visible emissions from the cyclones shall not exceed 5% opacity on a six-minute block average basis

Departmental Findings of Fact and Order Air Emission License

5. Hazardous Air Pollutant (HAP)Emissions

The use of solvents and coatings containing HAPs at Hussey is less than 10 tons/year therefore Hussey is not considered a major source for HAPs (Hazardous Air Pollutants) and is not subject to Title V permitting.

E. Facility Emissions (used to calculate the annual license fee)

Hussey has the following annual emissions based on:

- The licensed natural gas burning equipment operating 8,760 hours per year
- The emergency diesel generators each operating 500 hour per year (diesel fuel with a maximum sulfur content of 0.05% sulfur maximum)
- 8.0 Tons per year of process VOC emissions
- 3.0 Tons per year of process HAP emissions

Total Annual Emission for the Facility

(used to calculate the annual license fee)

Pollutant	<u>PM</u>	<u>PM</u> ₁₀	$\underline{\mathbf{SO}}_2$	<u>NO</u> _x	<u>CO</u>	<u>voc</u>	<u>HAP</u>
Boiler B-3	0.58	0.58	0.01	1.13	0.87	0.06	
Heater #9	0.88	0.88	0.01	1.70	1.31	0.09	
Heater #19	1.81	1.81	0.02	3.51	2.70	0.19	
Heater #23	0.64	0.64	0.01	1.24	0.96	0.07	
Burn Off #10	0.44	0.44	0.01	0.85	0.65	0.05	
First Stage Washer	2.63	2.63	0.03	5.10	3.93	0.28	
Heater							
Dry-Off Oven	1.05	1.05	0.01	2.04	1.57	0.11	
Small Parts Cure	0.53	0.53	0.01	1.02	0.79	0.06	
Oven							
Perkins Fire Pump	0.08	0.08	0.01	1.15	0.25	0.09	
Cummings Fire	0.08	0.08	0.01	1.11	0.24	0.09	
Pump							
Process						8.0	3.0
Total	8.7	8.2	0.1	18.9	13.3	9.1	3.0

III.AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Based on the total facility emissions, Hussey is below the emissions level required for modeling and monitoring.

Departmental Findings of Fact and Order Air Emission License

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment.
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-374-71-J-R subject to the following conditions.

<u>Severability</u>. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]

Departmental Findings of Fact and Order Air Emission License

- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [MEDEP Chapter 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.

[MEDEP Chapter 115]

7

Departmental Findings of Fact and Order Air Emission License

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
 - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[MEDEP Chapter 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [MEDEP Chapter 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]

Departmental Findings of Fact and Order Air Emission License

SPECIFIC CONDITIONS

(16) **Boilers, heaters and ovens**

A. Hussey shall only fire natural gas as a fuel in the boilers, heaters and ovens listed in this condition. [MEDEP Chapter 115, BPT]

9

B. Emissions from Boiler B-3 shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.07
PM ₁₀	0.07
SO_2	0.01
NO_X	0.13
CO	0.10
VOC	0.01

C. Emissions from Heater #9 shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.10
PM ₁₀	0.10
so_2	0.01
NO_X	0.19
CO	0.15
VOC	0.01

D. Emissions from Heater #19 shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.12	0.21
PM ₁₀	n/a	0.21
so_2	n/a	0.01
NO_X	n/a	0.40
СО	n/a	0.31
VOC	n/a	0.02

E. Emissions from Heater #23 shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.07
PM ₁₀	0.07
so_2	0.01
NO_X	0.14
СО	0.11
VOC	0.01

F. Emissions from the Burn Off #10 shall not exceed the following: [MEDEP Chapter 115, BPT]

Pollutant	<u>lb/hr</u>
PM	0.05
PM ₁₀	0.05
so_2	0.01
NO_X	0.10
CO	0.07
VOC	0.01

G. Emissions from the First Stage Washer Heater shall not exceed the following: [MEDEP Chapter 115, BPT]

• 110, 21 1]		
<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.05	0.30
PM ₁₀	n/a	0.30
so_2	n/a	0.01
NO_X	n/a	0.58
СО	n/a	0.45
VOC	n/a	0.03

H. Emissions from the Dry-off Oven shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.12
PM ₁₀	0.12
SO_2	0.01
NO_X	0.23
CO	0.18
VOC	0.01

I. Emissions from the Small Parts Cure Oven shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.06
PM ₁₀	0.06
SO_2	0.01
NO_X	0.12
CO	0.09
VOC	0.01

J. Visible emissions from each boiler, heater or oven shall not exceed an opacity 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [MEDEP Chapter 101]

(17) **Diesel Operated Fire Pumps**

- A. Hussey shall limit the Perkins Fire Pump and the Cummings Fire Pump to 500 hr/yr of operation each (based on a 12 month rolling total). Compliance shall be demonstrated by a written log of all generator operating hours. An hour meter shall be maintained and operated on the fire pump generators. [MEDEP Chapter 115, BPT]
- B. The generators shall only be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. A log shall be maintained documenting the date, time, and reason for operation. [MEDEP Chapter 115, BPT]
- C. The Perkins Fire Pump and the Cummings Fire Pump each shall fire diesel fuel oil with a sulfur limit not to exceed 0.05% by weight. Compliance shall be based on fuel records from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. [MEDEP Chapter 115, BPT]
- D. Emissions from the Perkins Fire Pump shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.32
PM ₁₀	0.32
SO_2	0.05
NO_X	4.59
CO	0.99
VOC	0.36

12

E. Emissions from the Cummings Fire Pump shall not exceed the following: [MEDEP Chapter 115, BPT]

<u>Pollutant</u>	<u>lb/hr</u>
PM	0.31
PM ₁₀	0.31
SO ₂	0.05
NOX	4.45
СО	0.96
VOC	0.35

F. Visible emissions from the Perkins Fire Pump and the Cummings Fire Pump each shall not exceed 30% opacity on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period. [MEDEP Chapter 101(B)(1)(f)]

(18) Process Emission Sources

- A. VOC emissions from all processes shall not exceed 8.0 tons/yr based on a 12-month rolling total. [MEDEP Chapter 115, BPT]
- B. HAP emissions from all processes shall not exceed 3.0 tons/yr based on a 12-month rolling total. [MEDEP Chapter 115, BPT]
- C. Compliance with the above VOC and HAP ton per year limits shall be demonstrated by monthly mass balance calculations using the amount of material used and the VOC and HAP content of the material as found on the MSDS sheets. Hussey shall maintain monthly records on the premises to document the name and identification of each coating and the mass of VOC and HAP per volume of each coating used on each coating unit, line or operation. [MEDEP Chapter 115, BPT]
- D. Visible emissions from the cyclones shall not exceed 5% opacity on a six-minute block average basis. Hoppers from both cyclones and the fabric filters shall be emptied regularly to ensure proper operation of the equipment. [MEDEP Chapter 115, BPT]
- E. Visible emissions from the roof top vents (P-18, P-19 and P-20) shall not exceed 5 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 115, BPT]
- F. Visible emissions from the welding vents W10, W11, W12, W13, W14 and W15 shall not exceed 5 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 115, BPT]
- (19) All handling and transferring of VOC/HAP-containing materials to and from containers and drums shall be conducted in a manner that minimizes spills. [MEDEP Chapter 115, BPT]

Departmental Findings of Fact and Order Air Emission License

13

- (20) All containers and drums shall be free of cracks, holes and other defects and shall remain closed at all times unless materials are being transferred to or removed from them. [MEDEP Chapter 115, BPT]
- (21) **Air Toxics Emission Statement** [MEDEP Chapter 137]

Hussey is limited to 3.0 tons per hear of total HAPs. A single HAP emission has the potential to exceed the thresholds for HAPs listed in Appendix A of MEDEP Chapter 137. If this occurs in an inventory year, in accordance with MEDEP Chapter 137 the licensee shall report, no later than July 1 every three years (2009, 2012, 2015, etc.) or as otherwise stated in Chapter 137, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a computer program supplied by the Department or a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Air Toxics Inventory Coordinator

Maine DEP

Bureau of Air Quality 17 State House Station Augusta, ME 04333-0017

Phone: (207) 287-2437

(22) Hussey shall pay the annual air emission license fee within 30 days of **July 30** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3. [38 MRSA §353-A]

DONE AND DATED IN AUGUSTA, MAINE THIS

DAY OF

2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _	
	DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:_ Date of application acceptance:	-	
Date filed with Board of Environmental Protection:		

This order prepared by Mark E. Roberts, Bureau of Air Quality